

CLAIMS:

1. A wireless network, comprising:
 - a source (101) that transmits a signal to at least one destination during a scheduled time period; and
 - 5 at least one node (106, 109), which is hidden from the destination, and which transmits a signal during the scheduled time period.
- 10 2. A wireless network as recited in claim 1, wherein the source transmits a request to send (RTS) (202) to the at least one destination and the RTS includes a transmission duration and recipient information.
- 15 3. A wireless network as recited in claim 2, wherein at least one node (106) does not receive the RTS.
4. A wireless network as recited in claim 3, wherein the destination sends a clear to send (CTS) (207) transmission to
20 the source after receiving the RTS, and at least one node that receives the RTS does not receive the CTS.
- 25 5. A wireless network as recited in claim 4, wherein the network includes at least one node (107) that receives the CTS.
6. A wireless network as recited in claim 2, wherein at least one node in the network receives the RTS and sets at least one network allocation vector (208, 216) during which
30 the at least one node does not transmit.
7. A wireless network as recited in claim 6, wherein the at least one node that receives the RTS transmits during at

least a portion of the scheduled time period.

8. A wireless network as recited in claim 5, wherein the at least one node that receives the CTS does not transmit during 5 the scheduled time period.

9. A wireless network as recited in claim 8, wherein the at least one node that receives the CTS transmits during a transmission of an acknowledgement (ACK) by the at least one 10 destination.

10. A wireless network as recited in claim 1, wherein the transmission during the scheduled time period includes at least one data frame.

15 11. A wireless network as recited in claim 1, wherein the source transmits a frame to at least one destination and the frame includes transmission duration and recipient information.

20 12. A wireless network as recited in claim 11, wherein the destination sends a response transmission to the source after receiving the frame and at least one node that receives the frame does not receive the response.

25 13. A method of wireless communication in a wireless network, the method comprising:

providing a source (101) that transmits a signal to at least one destination (102) during a scheduled time period; 30 and

providing at least one node (106), which is hidden from the destination, and which transmits a signal during the

scheduled time period.

14. A method as recited in claim 13, wherein the source transmits a request to send (RTS) (202) to the at least one destination and the RTS includes a duration value and recipient information.

15. A method as recited in claim 14, wherein at least one node in the network does not receive the RTS.

10 16. A method as recited in claim 14, wherein the destination sends a clear to send (CTS) (207) transmission to the source after receiving the RTS, and the least one node (106) does not receive the CTS.

15 17. A method as recited in claim 16, wherein the network includes at least one node (107) that receives the CTS.

20 18. A method as recited in claim 15, wherein at least one node in the network receives the RTS and sets at least one network allocation vector (NAV) (208) during which the at least one node does not transmit.

25 19. A method as recited in claim 18, wherein the at least one node that receives the RTS transmits during at least a portion of the scheduled time period.

30 20. A method as recited in claim 17, wherein the at least one node that receives the CTS does not transmit during the scheduled time period.

21. A method as recited in claim 20, wherein the at least one node that receives the CTS transmits during a

transmission of an acknowledgement (ACK) (215) by the at least one destination.

22. A method as recited in claim 13, wherein the
5 transmission during the scheduled time period includes at least one data frame.

23. A method as recited in claim 13, wherein the source transmits a frame to at least one destination and the frame
10 includes a duration value and recipient information.

24. A method as recited in claim 23, wherein the destination sends a response transmission to the source after receiving the frame and at least one node that receives the frame does
15 not receive the response.

25. A wireless network as recited in claim 2, wherein a header of the RTS 202 may include an offset in addition to a duration value and an identification of the destination, and
20 the offset specifies a time between the end of the reception of the RTS and the time that a network allocation vector (NAV) is set.

26. A wireless network as recited in claim 4, further comprising at least one node (110), which receives both the
25 RTS and the CTS.

27. A method as recited in claim 17, wherein the network includes at least one node (110), which receives both the RTS
30 and the CTS.